

**Iowa Department of Natural Resources  
Natural Resource Commission**

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ITEM

18

DECISION

TOPIC        **Land Acquisition Project Approval**

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**1. Spring Run Wetland Complex – Dickinson County – Raymond & Susan Meylor**

The Natural Resource Commission is requested to approve the acquisition of a tract of land located in Dickinson County. This approximately 141-acre tract is offered by Raymond and Susan Meylor for the appraised price of \$240,000. A Wetland Reserve Program easement encumbers 103 acres of the property.

Licensed appraiser, Steven K. Schmidt, of Schmidt Appraisal Services, Spirit Lake, Iowa submitted the appraisal. The purchase agreement was negotiated by Jerry Gibson.

The property is located five miles east of Arnold's Park, and has excellent public access from 290th Avenue on the East; 190th Street on the South; and 285th Avenue on the West. The property consists of 103 acres of land encumbered by a Wetland Reserve Program easement; 34 acres of cropland of which 18 acres are enrolled in the Conservation Reserve Program; and 4 acres of road right of way. Development by the NRCS and the landowners include 37 acres of wetland/marsh, and 66 acres of native prairie seeding. Sellers have reserved agricultural rights for 2010 which includes the 2010 CRP payment.

The Wildlife Bureau will manage the property to provide additional migratory waterfowl habitat; improve water quality through natural filtration; and provide outdoor recreation. Estimated survey costs are \$2,500.

Acquisition funding will be 100% Wildlife Habitat Stamp, and thus the property will remain on the property tax rolls. Incidental closing costs are the responsibility of the Department.

Staff recommends approval of the land acquisition.

**2. Waterman Creek Prairie – O'Brien County – The Nature Conservancy**

The Natural Resource Commission is requested to approve the acquisition of a tract of land located in O'Brien County. This 109-acre tract is offered by The Nature Conservancy for the REAP Grant amount of \$164,685.00. The tract appraised for \$240,000.00, and TNC paid approximately \$241,000.00 in April 2009.

The appraisal was submitted by licensed appraiser, Greg Tritle of Vander Werff and Associates, Inc., Sanborn, Iowa. The purchase agreement was negotiated by Jerry Gibson.

The property is located approximately 3 ½ miles southeast of Sutherland, and is bisected by Iowa Highway 10. The property consists of approximately 91 acres of pasture with timber, and 18 acres of cropland. The average CSR on the cropland is 57. The property is utilized by bald eagles during migration and for nesting, as well as upland game. The tract will play an important role in the development and management of Waterman Creek Prairie.

The property will be managed by the Wildlife Bureau. No fencing costs are anticipated, and the survey prepared by Kuehl and Payer, Ltd. was paid for by The Nature Conservancy.

Acquisition funding will be provided from the REAP-Public/Private Account (100%-\$164,685.00), and TNC has donated the difference (\$75,315.00) between the selling price and the appraised price. The tract will remain on O'Brien County property tax rolls. Incidental closing costs are the responsibility of the Department.

Staff recommends approval of the land acquisition.

### **3. Boone Forks WMA -- Hamilton County – INHF**

The Natural Resource Commission's approval is requested to purchase a tract of land located in Hamilton County northwest of state-owned and managed Boone Forks Wildlife Management Area. Iowa Natural Heritage Foundation offers this 200-acre tract for the price of \$375,640. INHF acquired the property in May 2009 for \$400,000. The appraised price of the tract is \$500,000.

David Nebel, Licensed Appraiser of Nevada, Iowa, submitted the appraisal. Rick Hansen negotiated the purchase agreement.

This property is located 5 miles north of Stratford in western Hamilton County. The gently sloping to steep tract is comprised primarily of upland timber (180 acres), along with two small cropland fields totaling 18 acres. The Boone River severs the southeast corner of the property. There are no building improvements. Access is provided by a county gravel surface road forming the west boundary.

This tract will provide for wildlife habitat, and enhance public recreation to this area. The Wildlife Bureau will manage the property in accord with the area management plan.

Acquisition funding will be \$250,640 from a REAP Public/Private grant, and \$125,000 from REAP Protected Waters Area. The tract will remain on the property tax rolls. No survey or fencing costs are anticipated. Incidental closing costs will be the responsibility of the Department.

Staff recommends approval of the land acquisition.

#### **4. Little Buck WMA -- Bremer County – INHF**

The Natural Resource Commission's approval is requested to purchase a tract of land located in Bremer County adjacent to state-owned and managed Little Buck Wildlife Management Area and just west of Aldo Leopold Wildlife Management Area. Iowa Natural Heritage Foundation offers this 93-acre tract for the price of \$139,380. INHF acquired the property in January 2010 for \$139,380. The appraised price of the tract is \$278,800.

Bill Burkle, Licensed Appraiser of Hampton, Iowa, submitted the appraisal. Rick Hansen negotiated the purchase agreement.

This irregular-shaped property is located 2 ½ miles east of Readlyn in southeastern Bremer County. The level tract is comprised of entirely of bottomland timber and bounded on the west by the Wapsipinicon River. The timber reflects a high quality oak/hickory mix interspersed with permanent and seasonal wetlands. There are no building improvements. Access is provided by state-owned Little Buck WMA adjacent north.

This tract will provide for wildlife habitat, and enhance public recreation to this area. In addition, the area is within a designated bird conservation area and within the range of an existing population of Blandings turtles. The Wildlife Bureau will manage the property in accord with the area management plan.

Acquisition funding will be from the Wildlife Habitat Stamp. The tract will remain on the property tax rolls. A boundary survey will be required. No fencing cost is anticipated. Incidental closing costs will be the responsibility of the Department.

Staff recommends approval of the land acquisition.

#### **5. Lost Grove Lake -- Scott County – Bruce and Emmy Lou Dexter**

The Natural Resource Commission's approval is requested to accept a no cost permanent flowage easement from Bruce and Emmy Lou Dexter. The easement lies below (east of) the emergency spillway for the proposed Lost Grove Lake and adjacent to the east side of the Grunwald tract (subsequent item). The easement area consists of approximately 12.2 acres.

Jerry Gibson negotiated the permanent easement.

The purpose of the permanent easement is to allow surface water to flow across the Dexter property in the event the emergency spillway is utilized. Additional information on the Lost Grove Lake emergency spillway is attached.

The landowners have stipulated that in the event the emergency spillway is used the Iowa DNR would compensate landowners for the damage caused by flood waters. Damages will be calculated based on the present market value of the affected land.

No surveying costs are anticipated. Incidental closing costs will be the responsibility of the Department.

Staff recommends approval of the easement acquisition.

#### **6. Lost Grove Lake -- Scott County -- Dale and Jill Grunwald**

The Natural Resource Commission's approval is requested to accept a no cost permanent flowage easement from Dale and Jill Grunwald. The easement lies below (east of) the emergency spillway for the proposed Lost Grove Lake. The easement area consists of approximately 7.5 acres.

Jerry Gibson negotiated the permanent easement.

The purpose of the permanent easement is to allow surface water to flow across the Grunwald property in the event the emergency spillway is utilized. Additional information on the Lost Grove Lake emergency spillway is attached.

The landowners have stipulated that in the event the emergency spillway is used the Iowa DNR would compensate landowners for the damage caused by flood waters. Damages will be calculated based on the present market value of the affected land.

No surveying costs are anticipated. Incidental closing costs will be the responsibility of the Department.

Staff recommends approval of the easement acquisition.

Travis Baker, Land & Waters Bureau Chief  
Conservation and Recreation Division  
February 11, 2010

Attachment: Lost Grove Lake Emergency Spillway Perspective  
Acquisition Maps

#### **Lost Grove Lake Emergency Spillway Perspective**

The following is a perspective to help provide an understanding of the capacity for a lake to store water before the emergency spillway is utilized. This perspective was compiled utilizing information gathered from Natural Conservation Resource Service engineer Lee White, DNR Floodplains engineer Dave Allen and AECOM consultant for the design of Lost Grove Lake.

For design purposes, the National Weather Service (NWS) has synthetically created the 100-year/24-hour storms to simulate the maximum effect of a storm of any duration that has a 1% chance of occurring. A high hazard dam classification has the most stringent design requirement. An emergency spillway with this classification will not be utilized at or below the 100 year storm event. A more stringent design criterion is not used because data is not available for a flood event greater than 100 years. DNR dam inspector and engineer Dave Allen believes the 100 year storm event for this type of dam is conservative and is appropriate for establishing

the emergency spillway elevation for high hazard dams such as Lost Grove Lake. Iowa lakes have performed well when experiencing historic storm events at or approaching the 100 year storm event.

The 100-year storm for the entire state is between 6" and 7" in a 24-hour period. For Lost Grove Lake the highest storm event that would not use the emergency spillway is 6.24 inches in the first 24 hours. But a lake constructed for a high hazard classification has the ability to sustain an elevation at the emergency spill elevation with subsequent storm events. For example a 6.42 inch storm (100 year storm/24 hours) would raise the Lost Grove Lake to the crest of the emergency spillway. After the first 24 hours it could rain, 2.3 inches per day or less indefinitely and the emergency spillway would never be utilized.

Not all lakes in Iowa are constructed for a high hazard classification. In fact it is really not known what criteria were used for the constructions of our older lakes. For Rathbun Lake, the 100 year storm projection is 1 foot above the emergency spillway. The record lake elevation set in 1993 was 1.5 feet below this 100 year storm projection. The most recent lakes, have been constructed by the Natural Resource Conservation Service for flood protection, recreation and water supply. Lakes (Icaria and Three Mile) were constructed for the 50 year storm event and lakes (Little River, Sugema and Twelve Mile) were constructed for the 100 year storm event.

During 2008 floods water trickled over the emergency spillways at 12 Mile and Little River (100 year). In this year water came close in passing over the Lake Icaria and 3 Mile Lake (50 year) emergency spillways. No notable damage occurred and any of the locations. The Little River Lake emergency spillway was utilized in September 1992 when the local area experienced a 16 inch rainfall event. The spillway only sustained minor damage. This rainfall greatly exceeded the statewide 6" to 7" in a 24-hour period. It has been found that the peak inflow of watersheds experiencing rainfall events similar to the 16" at Little River Lake generally occur in the first 10 hours after the storm. When NRCS engineer Lee White was asked why the spillway did not sustain major damage he said the watershed was well vegetated and this vegetation had the ability to retain and slow surface runoff causing the peak runoff amount to be much less. Management activities on public land at Lost Grove have greatly increased the ability to retain and slow surface runoff. The DNR owns ~25% of the Lost Grove watershed (excluding the lake's acreage); much of this land is in permanent vegetative cover and since taking ownership the DNR has constructed 13 ponds. The DNR continues to work with the Scott County Soil and Water Conservation District to assist watershed landowners to establish waterways and buffer strips. All these effort will help slow surface runoff to Lost Grove Lake.